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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: NGUYEN et al.

Examiner: Phan, Thai Q.

Application No.: 09/872,401

Group Art Unit: 2123

Filed: June 1, 2001

Docket: 2001 P 09906 US 01

For: Methods And Systems For Electronics Assembly System Consultation And Sales

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

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Nancy Demko

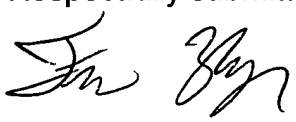
REQUEST FOR REINSTATEMENT OF THE APPEAL

Sir:

In response to the reopening of prosecution and the Official Action mailed on April 14, 2006, Applicant hereby requests reinstatement of the Appeal filed on January 26, 2006. Attached herewith, in triplicate, is a Supplemental Appeal Brief addressing the new grounds of rejection.

Since prosecution on the merits was reopened prior to a decision on the merits by the Board of Patent Appeals, the fee paid previously for the Notice of Appeal and the Appeal Brief of January 26, 2006 will be applied to this later appeal. Thus, no additional fee is required.

Respectfully submitted,



Frank J. Nuzzi
Registration No. 42,944
Attorney for Applicant
Tel. No. (732) 321-3002

Customer No. 28524

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SUPPLEMENTAL APPEAL BRIEF

Commissioner of Patents
P. O. Box 1450
Alexandria, VA 22313-1450

Sir:

This is a Supplemental Appeal from the rejection (issued upon reopening prosecution) of claims 1-3, 5-7, 9-12, 14-20 and 22-24 of the above-identified application.

This Supplemental Appeal Brief is submitted as required by 37 C.F.R. § 41.37. No fee is due since the fee was paid with the original Brief filed on January 26, 2006.

1. Real Party in Interest:

This application is assigned to Siemens Dematic Electronic Assembly Systems Inc., the real party of interest.

2. Related Appeals and Interferences:

There are no other appeals or interferences known to Appellant that will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

3. Status of Claims:

Claims 1-3, 5-7, 9-12, 14-20 and 22-24 are pending in this application and stand rejected by the Examiner.

4. Status of any Amendment Filed Subsequent to Final Rejection:

No Amendment was filed in response to the final rejection. A Response to the final rejection was filed on July 28, 2005 and a Supplemental Response was filed October 24, 2005.

5. Summary of Invention

The invention of claim 1 is a method for providing consulting services to a customer in connection with the customer's electronics assembly system, comprising the steps of:

a. identifying a set of solutions opportunities for the customer's electronics assembly system (page 113, lines 27-30; Fig. 30, step 3002);

b. modeling, on a computer, the customer's electronics assembly system in real time with the customer present (page 113, line 32 to page 114, line 5; Fig. 30, step 3004);

c. defining one or more performance metrics for a proposed solution (page 114, lines 5-8; Fig. 30, step 3006);

d. prioritizing the identified solutions by running the model for each of the identified solutions (page 114, lines 9-12; Fig. 30, step 3008);

e. selecting a proposed solution from among the prioritized, identified solutions (page 114, lines 12-14; Fig. 30, step 3010);

f. quantifying the benefit of the proposed solution relative to the one or more performance metrics (page 114, lines 14-16; Fig. 30, step 3012); and

g. communicating the quantified benefit to the customer (page 114, lines 16-17; Fig. 30, step 3014)

wherein the quantified benefit comprises a cost of ownership measure (page 114, lines 14-24), and

wherein the customer's electronics assembly system is modeled within approximately one half hour (page 4, lines 9-13 and page 9, lines 1-4).

The invention of claim 2 is a method wherein the model represents the electronics assembly system at a material flow level of abstraction (page 101, lines 5-13).

The invention of claim 3 is a method wherein the model comprises a simulation (page 101, lines14-22).

The invention of claim 5 is a method wherein the proposed solution comprises information relating to a machine in the electronics assembly system (page 101, lines 14-22).

The invention of claim 6 is a method wherein the proposed solution comprises information relating to a software tool in the electronics assembly equipment (page 105, lines 13-22).

The invention of claim 7 is a method wherein the proposed solution comprises information relating to an operating parameter of a machine in the electronics assembly system (page 105, lines 13-22).

The invention of claim 9 is a method comprising the steps of:

modifying the configuration of a modeled electronics assembly system proposed solution to reflect information provided by the customer (page 114, lines 19-24; Fig. 31, step 3114);

quantifying the benefit of the modified proposed solution relative to the one or more performance metrics (page 114, lines 24-27; Fig. 31, step 3116); and

communicating the quantified benefit of the modified proposed solution to the customer (page 114, lines 16-17; Fig. 31, step 3118).

The invention of claim 10 is a method for developing an electronics assembly equipment sales offer to a customer during a particular sales session, the method comprising the steps of:

a. identifying a set of customer requirements and constraints (page 115, lines 3-7; Fig. 32, step 3202);

b. selecting an electronics assembly configuration, comprising electronics assembly equipment or its operating parameters or both, for accomplishing the customer requirements (page 115, lines 7-8; Fig. 32, step 3204);

c. establishing a model of an assembly system comprising the selected configuration (page 115, lines 8-10; Fig. 32, step 3206);

d. running the model on a computer to generate at least one performance measure (page 115, lines 10-12; Fig. 32, step 3208);

e. comparing the at least one performance measure against the customer constraints (page 115, lines 12-13; Fig. 32, step 3210); and

f. if the at least one performance measure satisfies the customer constraints, offering to sell at least a subset of the electronics assembly equipment of the configuration to the customer (page 115, lines 13-21; Fig. 32, steps 3212, 3214),

wherein the offer is developed, with the benefit of the model, during the sales session (page 113, lines 23-28), and

wherein the customer's electronics assembly system comprising the selected configuration is modeled within approximately one half hour (page 4, lines 9-13, page 9, lines 1-5).

The invention of claim 11 is a method wherein the model represents the electronics assembly system at a material flow level of abstraction (page 101, lines 5-13).

The invention of claim 12 is a method wherein the model comprises a simulation (page 101, lines14-22).

The invention of claim 14 is a method wherein the proposed configuration comprises information relating to a machine in the electronics assembly system (page 101, lines 14-22).

The invention of claim 15 is a method wherein the proposed solution comprises information relating to a software tool in the electronics assembly equipment (page 105, lines 13-22).

The invention of claim 16 is a method wherein the proposed configuration comprises information relating to an operating parameter of a machine in the electronics assembly system (page 105, lines 13-22).

The invention of claim 17 is a method wherein the performance measure relates to a cost of ownership measure (page 114, lines 14-24).

The invention of claim 18 is a method for optimizing the performance of an electronics assembly system during a customer session, comprising the steps of:

a. establishing, during the session, a model of an assembly system having a plurality of possible configurations (page 15, lines 22-25; Fig. 33, step 3302);

b. selecting a measure of performance for the assembly system (page 115, lines 25-28; Fig. 33, step 3304);

c. selecting for evaluation a subset of the plurality of configurations (page 114, lines 26-28; Fig. 33, step 3306);

d. selecting a criterion for the comparison of the subset of the plurality of configurations and selection of a preferred configuration (page 115, lines 29-30; Fig. 33, step 3308);

e. running the model on a computer to predict the measure of performance for the system, for each of the subset of the plurality of configurations (page 116, lines 1-3; Fig. 33, step 3310);

f. applying the criterion to the results obtained in step e to select a preferred configuration of the assembly system (page 116, lines 3-4; Fig. 33, step 3312), and

g. quantifying a benefit of the preferred configuration, wherein the quantified benefit comprises a cost of ownership measure (page 114, lines 14-24), and

wherein the customer's electronics assembly system is modeled within approximately one half hour (page 4, lines 9-13, page 9, lines 1-5).

The invention of claim 19 is a method wherein the model represents the electronics assembly system at a material flow level of abstraction (page 101, lines 5-13).

The invention of claim 20 is a method wherein the model comprises a simulation (page 101, lines14-22).

The invention of claim 22 is a method wherein the preferred configuration includes information relating to a machine in the electronics assembly system (page 101, lines 14-22).

The invention of claim 23 is a method wherein the preferred configuration includes information relating to a software tool in the electronics assembly equipment (page 105, lines 13-22).

The invention of claim 24 is a method wherein the preferred configuration includes information relating to an operating parameter of a machine in the electronics assembly system (page 105, lines 13-22).

6. Issue

Whether claims 1-3, 5-7, 9-12, 14-20 and 22-24 are patentable under 35 U.S.C. 102(e) as not being anticipated by Spira et al. (U.S. Patent Application Publication No. 2003/0172002).

7. Grouping of Claims:

With regard to the obviousness rejections claims 1-3, 5-7 and 9 stand or fall together; claims 10-12, and 14-17 stand or fall together; and claims 18-20 and 22-24 stand or fall together.

8. Arguments

Claims 1-3, 5-7, 9-12, 14-20 and 22-24 are patentable under 35 U.S.C. 102(e) as not being anticipated by Spira et al.

In the April 14, 2006 Office Action that re-opened prosecution, the Examiner rejected claims 1-3, 5-7, 9-12, 14-20 and 22-24 under 35 U.S.C. 102(e) as being anticipated by Spira et al. The claimed invention is not taught by Spira et al. for the following reasons.

Claim 1 recites "identifying a set of solutions opportunities for the customer's electronics assembly system" and "modeling, on a computer, the customer's electronics assembly system in real time with the customer present" (emphasis added). The Examiner contends that Spira et al. teach the steps of "Identifying a solution for the customer/client's assembly plant..." and "Modeling the plant in a computer system...". The Examiner used the term "plant" and has conveniently ignored the claim language electronics assembly system. Spira et al. teach an overall plan for providing maintenance for a business or a plant and in no way teaches a method for providing consulting services to a customer in connection with the customer's electronics assembly system as defined in claim 1. "All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970)."

Furthermore, the Examiner contends that Spira et al. teach the step of "Defining performance matrix or data for service model and process simulation" and "Prioritizing the solution on service demand". However, the Examiner has failed to show where Spira et al. disclose these steps. Claim 1 requires, prioritizing the identified solutions

by running the model for each of the identified solutions, which was not addressed by the Examiner. In fact, Spira et al. at [0126] teaches prioritizing by using a questionnaire, not by running a model as claimed.

Finally, there is no teaching in Spira et al. that the "customer's electronics assembly system is modeled within approximately one-half hour". The Examiner's assertion that Spira et al. notes that time is a factor is not a teaching of the specific time claimed.

As specified in MPEP §2131: "'A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference' *Verdegaal Bros. V. Union Oil Co. of California,* 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). ... 'The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989)." MPEP 2131 (Rev. 3, Aug. 2005, at p. 2100-76).

With regard to claim 10, it appears the Examiner has again analyzed the steps of claim 1, not claim 10. For example, claim 10 recites, "selecting an electronics assembly configuration, comprising electronics assembly equipment or its operating parameters or both, for accomplishing the customer requirements". Again, Spira et al. does not teach selecting an electronics assembly configuration comprising electronics assembly equipment or its operating parameters or both as required by the claim. In addition, claim 10 recites, "if the at least one performance measure satisfies the customer constraints, offering to sell at least a subset of the electronics assembly equipment of the configuration to the customer". There is no teaching of offering to sell at least a subset of electronics assembly equipment to a customer in Spira et al. Furthermore, there is no teaching in Spira et al. that "customer's electronics assembly system comprising the selected configuration is modeled within approximately one-half hour". Thus, the rejection fails to demonstrate that the applied reference discloses each and every element of the claim. See MPEP 2131. "The identical invention must be shown

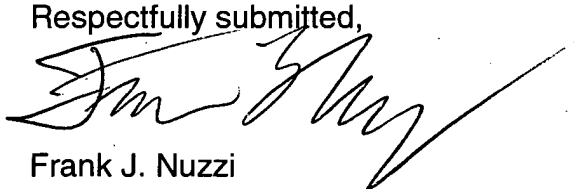
in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). "Anticipation cannot be predicated on teachings in the reference which are vague or based on conjecture." *Studiengesellschaft Kohle mbH v. Dart Industries, Inc.*, 549 F. Supp. 716, 216 USPQ 381 (D. Del. 1982), *aff'd.*, 726 F.2d 724, 220 USPQ 841 (Fed. Cir. 1984).

With regard to claim 18, it appears the Examiner has again analyzed the steps of claim 1, not claim 18. For example, claim 18 recites, "selecting for evaluation a subset of the plurality of configurations; selecting a criterion for the comparison of the subset of the plurality of configurations and selection of a preferred configuration; running the model on a computer to predict the measure of performance for the system, for each of the subset of the plurality of configurations" (emphasis added). There is no teaching in Spira et al. of running a model of each subset of a plurality of configurations of an electronics assembly system. Spira et al. also fails to teach that the customer's electronics assembly system is modeled within approximately one half hour.

Conclusion

For the reasons set forth above, it is clear that the Appellant's claims 1, 10 and 18, and the claims that depend there-from are not anticipated by Spira et al. Accordingly, it is respectfully submitted that the present invention should be properly patentable over this reference. It is respectfully requested that this appeal be granted and that the Examiner be reversed.

Respectfully submitted,



Frank J. Nuzzi
Registration No. 42,944
Attorney for Applicant
Tel. No. (732) 321-3002

CUSTOMER NO. 28524

APPENDIX — Claims on Appeal

1. (Previously Presented) A method for providing consulting services to a customer in connection with the customer's electronics assembly system, comprising the steps of:

a. identifying a set of solutions opportunities for the customer's electronics assembly system;

b. modeling, on a computer, the customer's electronics assembly system in real time with the customer present;

c. defining one or more performance metrics for a proposed solution;

d. prioritizing the identified solutions by running the model for each of the identified solutions;

e. selecting a proposed solution from among the prioritized, identified solutions;

f. quantifying the benefit of the proposed solution relative to the one or more performance metrics; and

g. communicating the quantified benefit to the customer,

wherein the quantified benefit comprises a cost of ownership measure, and

wherein the customer's electronics assembly system is modeled within approximately one half hour.

2. (Original) The method according to claim 1, wherein the model represents the electronics assembly system at a material flow level of abstraction.

3. (Original) The method according to claim 1, wherein the model comprises a simulation.

4. (Canceled)

5. (Original) The method according to claim 1, wherein the proposed solution comprises information relating to a machine in the electronics assembly system.

6. (Original) The method according to claim 1, wherein the proposed solution comprises information relating to a software tool in the electronics assembly equipment.

7. (Original) The method according to claim 5, wherein the proposed solution comprises information relating to an operating parameter of a machine in the electronics assembly system.

8. (Canceled)

9. (Original) The method according to claim 1, further comprising the steps of:

h. modifying the configuration of a modeled electronics assembly system proposed solution to reflect information provided by the customer;

i. quantifying the benefit of the modified proposed solution relative to the one or more performance metrics; and

j. communicating the quantified benefit of the modified proposed solution to the customer.

10. (Previously Presented) A method for developing an electronics assembly equipment sales offer to a customer during a particular sales session, the method comprising the steps of:

a. identifying a set of customer requirements and constraints;

b. selecting an electronics assembly configuration, comprising electronics assembly equipment or its operating parameters or both, for accomplishing the customer requirements;

c. establishing a model of an assembly system comprising the selected configuration;

d. running the model on a computer to generate at least one performance measure;

e. comparing the at least one performance measure against the customer constraints; and

f. if the at least one performance measure satisfies the customer constraints, offering to sell at least a subset of the electronics assembly equipment of the configuration to the customer,

wherein the offer is developed, with the benefit of the model, during the sales session, and

wherein the customer's electronics assembly system comprising the selected configuration is modeled within approximately one half hour.

11. (Original) The method according to claim 10, wherein the model represents the electronics assembly system at a material flow level of abstraction.

12. (Original) The method according to claim 10, wherein the model comprises a simulation.

13. (Canceled)

14. (Original) The method according to claim 10, wherein the proposed configuration comprises information relating to a machine in the electronics assembly system.

15. (Original) The method according to claim 10, wherein the proposed solution comprises information relating to a software tool in the electronics assembly equipment.

16. (Original) The method according to claim 14, wherein the proposed configuration comprises information relating to an operating parameter of a machine in the electronics assembly system.

17. (Original) The method according to claim 10, wherein the performance measure relates to a cost of ownership measure.

18. (Previously Presented) A method for optimizing the performance of an electronics assembly system during a customer session, comprising the steps of:

a. establishing, during the session, a model of an assembly system having a plurality of possible configurations;

b. selecting a measure of performance for the assembly system;

c. selecting for evaluation a subset of the plurality of configurations;

d. selecting a criterion for the comparison of the subset of the plurality of configurations and selection of a preferred configuration;

e. running the model on a computer to predict the measure of performance for the system, for each of the subset of the plurality of configurations;

g. applying the criterion to the results obtained in step e to select a preferred configuration of the assembly system, and

g. quantifying a benefit of the preferred configuration, wherein the quantified benefit comprises a cost of ownership measure,

wherein the customer's electronics assembly system is modeled within approximately one half hour.

19. (Original) The method according to claim 18, wherein the model represents the electronics assembly system at a material flow level of abstraction.

20. (Original) The method according to claim 18, wherein the model comprises a simulation.

21. (Canceled)

22. (Previously Presented) The method according to claim 18, wherein the preferred configuration includes information relating to a machine in the electronics assembly system.

23. (Previously Presented) The method according to claim 18, wherein the preferred configuration includes information relating to a software tool in the electronics assembly equipment.

24. (Previously Presented) The method according to claim 22, wherein the preferred configuration includes information relating to an operating parameter of a machine in the electronics assembly system.

25. (Canceled)